

AUTOMATIC POWER FACTOR CONTROLLER



APFC-Pro



- Micro Controller Automatic KVAR based sensing for optimize performance.
- No settings & No programming to be done.
- Reliable performance at Low Current (>5% of load).
- Automatically starts correction from low load current.
- Low Cost.
- Improve PF 0.99 lag of load, using PFCR for capacitor.



AUTOMATIC POWER FACTOR CONTROLLERS-1CT

NIPPEN Model APFC-Pro is used for measurement and control of PF using Reactive power compensation. Capacitor banks are suitably switched ON and OFF automatically to provide necessary compensation. An intelligent switching algorithm (Wear leveling) ensures uniform aging of the capacitors used to achieve the target PF.

FEATURES

- No user manual settings required. Fit and Forget.
- 1phase sensing Intelligent POWER FACTOR control algorithm .
- Intelligent POWER FACTOR control from switching of banks, based on time switching history (No of operations) thus improves capacitor life.
- Provision of 1 relay to set off alarm for PF under compensation.
- Auto CAPACITOR kVAr detection.
- Target PF factory -Programmable for Unity & Lead/ Lag values.
- Reliable performance at Low Current (>5% of load).
- Potential free contact for driving contactors to switch Capacitor. (5A/250V AC Relay With NO Contact).

ELECTRICAL SPECIFICATION

- Operating Voltage: 110-500 V AC LL 50/60 Hz.
- Current: 50mA-6A AC.
- Auxiliary supply: 80-265V ACDC ($\pm 20\%$) 50/60Hz.
- Power Consumption: <0.1VA in Current Circuit, < 0.1 VA in Voltage.
- ON/OFF Relay rating: 5A/250VAC - NO Contact.
- Power Factor 0.999Lag Factory Set able.

MODELS

- APFC-Pro -6R
- APFC-Pro -8R
- APFC-Pro -10R
- APFC-Pro -12R

DISPLAY

- Single row, 4 digits bright display.

ENVIRONMENT

- Ambient: -10° C to 55° C.
- Storage: -20° C to 70° C.
- Humidity: <95% RH Non condensing.

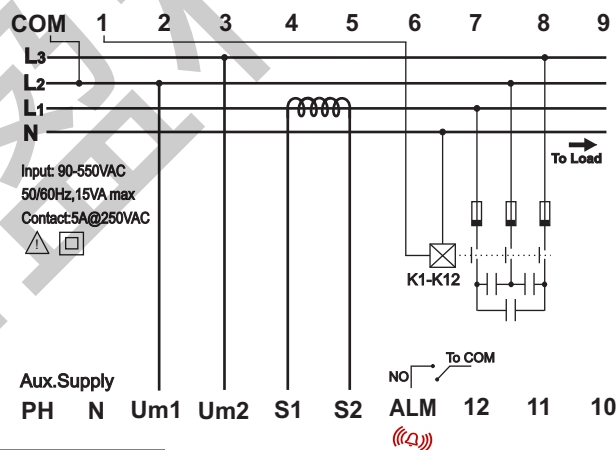
MECHANICAL DIMENSIONS

| | |
|---------------|-----------------------------------|
| Front | 96 x 96mm (Depth 54 mm) |
| Panel Cut out | 91 x 91mm ± 0.1 mm) |
| Casing | Flame retardant ABS |
| Connectors | Terminal block ABS |
| Protection | IP 52 front/ IP 20 Terminal block |

RELEVANT STANDARD

| | |
|----------|------------------|
| EMC | IEC 61326 |
| Immunity | IEC 61000-4-3 |
| Safety | IEC 61010-1-2001 |

WIRING DIAGRAM OF APFC-Pro -12R with Alarm



OTHER PRODUCT RANGES.,

- 1CT PFCR - 1 Phase sensing improving Power factor.
- 3CT PFCR - 3 Phase sensing improving Power factor with Multi function Meter.
- MDC - Avoid Penalties from Electricity Board.
- DT-108 - 3 & 1 Phase VAF and Multi function Meter.
- EM 34DS - Dual Source Energy Meter & Counter type meter.
- ELR - Earth leakage relay with CBCTs.
- SLM - Smart Load Manager multi function meter
- Analogue Meters, Insulation Testers, Earth Tester, CTs, Shunts.